"Chimps aren't one step below us on the evolutionary ladder. They're our cousins — practically our brothers."

He saw a gleam in her eye, as if she thought she'd scored a point. Perhaps it had all been guesswork, and she hadn't really been sure until he confirmed it. Perhaps she didn't know as much as she was pretending to...or perhaps there was some subtler game that she was playing.

"They weren't any smarter, so far as I could tell," she said. "Just weird-looking. The lost their hair, and their skin got thicker, like a rhino's. They grew taller and more thick-set, less playful. They got to like me while I was feeding them, before the experiment started, but afterwards they got confused — maybe depressed. Abel kept trying to talk to them in American Sign Language, but he didn't seem to be getting anywhere. It's possible that the whole thing was a dead end — if it wasn't, he never got the chance to make the breakthrough."

"But his methods seem to have worked out," Carmichael said. "That's a breakthrough in itself — and the chimps were still alive after they changed, still functioning. You probably don't realize how significant that is."

Lucy Vollman shrugged. "Maybe if you tell me more," she said, "I'll be able to tell you more. Maybe it'll trigger something."

"Okay," said Carmichael, a little warily. "As you say, Abel's so-called jigsaw hypothesis proposes that the DNA making up earth's biosphere is recapitulating, at least in broad terms, an evolutionary sequence that's already taken place elsewhere in the universe, perhaps on millions of other planets orbiting other secondary stars — that is to say, in other systems formed out of the debris of ancient supernovas. If it were true, the process of evolution on any particular world would be analogous to the way in which plant species invade virgin ground, each species in its turn transforming the environment so as to create niches for other invaders, until you eventually reach a mature climax community.

"Some people who find Abel's hypothesis attractive think that human beings are the climax community of Earthly evolution; others think there may be one or two pieces of the genetic jigsaw left to slot into place. Abel's own opinon seemed to be that we might be so very close that it might only be a matter of switching on and off a few genes already in situ among the quiet DNA of our chromosomes. The differences between humans and chimpanzees aren't the result of our possession of genes that they don't have, but simply the result of the differential switching of genes we already hold in common. We already have techniques for controlling the expression of genes in primitive organisms; Abel was trying to use those techniques on chimps. He wasn't trying to humanize them, at least in any narrow sense of the term - he was trying to explore the potential they had for becoming... well, maybe in some respects better than human. He was trying to find in them the potential that might be in us for completing the jigsaw, and bringing the story of our evolution to its allotted climax. Not that it could be that simple, of course; we have hundreds of thousands of years of cultural evolution behind us, and that's what has shaped our

minds. Our genes only shape our bodies and our brains. It was all just a hypothesis anyway – maybe just a fairy story.

"I've read the reports Abel managed to file, but they don't track the metamorphosis as far as you've observed it; they only mention a few relatively subtle physiological changes — interesting enough, in their way, but not proof of anything. Unless you can give us a strong reason for continuing the work, the project will probably die, at least until the war ends. We have more urgent priorities now. Even so, I have a responsibility to salvage whatever information I can, and file it away in the hope that when better times come it will give someone else a flying start. Can you add anything further?"

The gleam in her eye was still there. He hadn't told her anything she didn't know – was she pleased that he didn't know any more?

"I don't think so," she said. "I wish I could tell you something really exciting, but I can't. As I say, the chimps seemed to me to get stupider rather than smarter, and if the next step in evolution involves growing that kind of skin, I'll be happy to stay primitive. I can't say anything about physiology and biochemistry, but looks-wise those apes were going backwards, not forwards. I guess we have to win the war before we try again – if we can win the war. If things go on the way they are, we might just lose everything. Wouldn't it be ironic if, just as we were about to put the last piece in place, the whole damn jigsaw fell apart? If we go, the rats and the cockroaches will have to start over with the business of re-collection."

"It's only a hypothesis," he reminded her. "Nothing you've told me counts as proof. What I'd like you to do, if you will, is write down everything you remember—including things that may not seem important."

She shrugged. "Sure," she said. "I'll get on it tomorrow." After a pause, she added: "I'd better go now."

He nodded, although she really didn't need his permission. She put her wet coat back on, and left the way she'd come in. He didn't stir until she was out of sight. Then he picked up the phone from beside the bed and dialled the lobby.

"It's okay," said Sergeant Andrews. "We saw her climbing the fire-escape. I sent Kravitz after her. He'll find out where she's going, and report back."

"Good," said Carmichael. "Smart work, sergeant." It was, of course, no more than he'd expected, given the sergeant's entirely understandable determination to be watchful at all times.

armichael spent the following morning at the police lab, going through the reports of the investigating officers and the results of the various tests carried out by Burke's team. The atmosphere around him was uncomfortably frosty; everyone was scrupulously polite but they all felt that his presence implied some criticism of their work. It was a relief when Andrews came to tell him, shortly after noon, that Kravitz had returned.

"What the hell took him so long?" Carmichael asked.

"It was a long trip," said Andrew. "She doesn't live in town — at least, she didn't stay in town when she left your room. She went way up into the hills. Walked all the way. Kravitz nearly lost her two or three times, brought the two sides of a dispute together and provided the framework for them to work out some form of settlement. He diffused hostility, allowed confrontation without violence. He had no doubt that Scawlter and the Paulians would be in dispute again before long, but in a world where there was little physical hardship, and crime was usually Cast out before birth, the Witnesses were normally enough to maintain an informal peace.

He was drifting again. He could sense that the villagers and the Paul's Acolytes were displeased with his vagueness, that they sought more direction from him, but there was little he could do. Tonight, he was distracted and weary. He did his best to keep the debate going, but by midnight there seemed little point in continuing.

A house with four rooms had been set aside for Ruig that night. He stood in the main living area, watching as the Traveller settled himself on a heap of cushions and Boy swung up to sit in a conveniently placed niche in one wall. He hadn't invited the Traveller in, but now that he was here there seemed little point in having him removed.

One of the men of the village stood in the dcorway, smiling obsequiously. "Of course," he said to Ruig, "all the usual hospitalities have been provided. We are grateful, indeed, that you could come so quickly, and that you were such a help. They had not spoken to us in over four months, before tonight."

Ruig waved in dismissal. He hated the type, the unctuous official for whom communication was a series of coded, rehearsed formalities. The man backed out of the doorway.

Ruig turned to the Traveller, but decided not to speak. Instead he stepped through a beaded doorway into one of the sleeping rooms. The air was scented, here, and he felt his spirits lifting. He shrugged the diagonal belt over his head, untied his cloak, his trousers. He had sensed her presence as soon as he entered the room. A hard cotton mattress covered one half of the floor and she lay on it, waiting. In the dim light from the walls he could see her slim shape, her hair splayed on the pillow, the dark triangle at her crotch. He wondered how the adults of the village had known of his preferences - it was not uncommon for less informed settlements to offer him men, children, animals, automata, as well as the women he favoured. Perhaps his reputation had gone before him; perhaps they had enquired.

He lay down beside her and in that instant wondered what she would be like. He reached out and put a hand on her belly, felt its nervous tremor at his touch. He pressed himself against her, found her mouth, her cheek, her neck. He was surprised that he felt so eager, after such a long day.

"I am honoured," she said, stroking him, the first words spoken between them. He did not care that it was the Witness she wanted, not Ruig, the man. He did not mind being a symbol at a time like this.

In the other room Ruig, the Traveller, activated a wall-screen and a surge of music washed over, into Ruig's, the Witness's, bed-chamber. He groaned, felt himself soften. He had forgotten about the other. Boy, he did not mind; Boy could be ignored, as he sat on his perch, cleaning his feathers or licking his downy crotch. But the other, the interloper...

The woman was disappointed, naturally. She tugged at his limp penis, urging him, beseeching him. All her pleas simply made it worse.

Angry, he turned away. "Go," he said. "I want to sleep." She cried as she pulled a cloak around herself and stepped clumsily into her shoes. He hated her sounds. He felt angry, frustrated. He hoped they wouldn't send him an alternative now — man, child, automaton. He hoped they would all just leave him in peace.

leep didn't come easily that night. His emotions were too fraught to allow him to settle and then, as he lay on his mattress alone, he heard the sounds from the next room – the woman's voice, her moans, and the deep, murmuring tones of the other Ruig – and he knew that the village's hospitality was being enjoyed by the man who shared his name.

In the morning he left the house, stepping past their tangled, naked bodies, under the gaze of his child, perched in his niche as before. "You have an Oracle?" he said, to the first woman he saw. She looked at him strangely, as if a Witness should have no need of technological assistance, but she pointed him towards the right building nonetheless.

The room was entered directly from the street, a screen drawing down automatically behind Ruig as he passed within. The Oracle took the traditional form of an old man, sitting against one wall with legs crossed. "Please," it said, arranging its veils. "Sit, if it puts you at ease." It gestured at the floor before it, and Ruig sank to his knees and then sat before the Oracle. "Please," it said, again. "What is the nature of your enquiry?"

Ruig stared into the machine's impassive features, its facade of human flesh spun over a metal framework. It seemed, as they always did, like a real man, a man of wisdom and hard-won experience, yet he knew that it was only a front, that the real processing of data and actions took place in the fabric of the building, or back in the city to which it was linked via the village's telecom mast. He knew that it was no more than an automaton, with a multi-cored cable plugged into its anus as it sat cross-legged, solemn-faced, before him.

"Who am I?" said Ruig, simply. He was accustomed to asking questions, but never about himself.

The Oracle raised one eyebrow and smiled a little. "A trick question?" it asked. But it was obliged to answer. "Somewhere on your torso you carry the Ward of a Witness. Its code identifies its registered carrier as Alcaj Ruig Tre. Alcaj Ruig Tre is fifty-six years old, was born in the town of Theoc, Province of the Sevens, educated —"

"But is that me?" interrupted Ruig. He did not know what he expected to gain from this meeting. When he had entered the room he had not even known that he would ask these questions. He had not understood quite how intensely this other Ruig had disturbed him.

The Oracle shrugged. Somehow the gesture seemed even more human to Ruig for the fact that it had been executed by an automaton. "You ask unusual questions," it said, after a long pause. "Facilities are available for you to provide tissue samples for analysis, if that is your wish." It stopped and watched him and